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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,205	10/09/2001	Seppo T. Vahasalo	PKR 2 0668	5802

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EXAMINER

SHAW, SHAWNA JEANNINE

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 03/15/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,205

Applicant(s)

VAHASALO ET AL.

Examiner

Shawna J. Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-6 and 8 is/are allowed.
- 6) ☒ Claim(s) 1, 7, 10-16 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Interpretation

The examiner notes that cellular and Bluetooth™ technologies operate around 2.4 GHz (i.e., greater than 500 MHz). Note also, specification p. 8 lines 5-15.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Frelburger et al. of record.

Frelburger et al. teaches a hand-held remote control device (140) for use in conjunction with various types of diagnostic imagers (col. 3 lines 2-15) including wireless communication of control and image signals through interface (175), as well as input and display means (col. 8 line 66 – col. 9 line 11). In addition, Frelburger et al. discloses wherein the wireless interface employs cellular or Bluetooth™ technology (col. 6 lines 53-61).

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murkami et al. of record in view of "Motorola to provide embedded Bluetooth computing solutions" (hereinafter 'Motorola 1'), or "Motorola: Motorola unveils strategy to provide embedded Bluetooth computing solutions" (hereinafter 'Motorola 2').

Regarding claims 1, 7 and 11-14, Murkami et al. discloses all of the claimed subject matter, including wireless interface (8-2), except for RF transmission frequencies greater than 500 MHz. Motorola 1 and Motorola 2

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disclose Bluetooth™ technology upgrades for wireless MRI machine communications (see entire documents). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the decade-old wireless transmission technology of Murkami et al. with the current Bluetooth™ technology of Motorola 1 or Motorola 2 to provide faster transmission rates at low cost and with connectivity to other users. Regarding claim 10, although specific protocols of RF communication are not addressed, lacking any criticality, techniques such as handshaking would have been an obvious matter of design choice to a person of ordinary skill in the art depending upon the particular application.

3. Claims 1, 7, 10-14 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kormos et al. of record in view of Frelburger et al. of record or 'Motorola 1' or 'Motorola 2.'

Regarding claims 1, 7, 10-14 and 19-21, Kormos et al. teaches a system and method for using a wireless remote control device in an MRI apparatus. Although Kormos et al. also teaches that the remote control may use RF signals above 13.1 MHz (col. 8 lines 45-51), transmission frequencies greater than 500 MHz are not addressed explicitly. Frelburger et al. teaches RF wireless transmission of control signals to an imaging device (col. 3 lines 2-15) and obtained image signals to an image processor (col. 2 lines 9-20 and col. 8 line 66 – col. 9 line 7) using cellular or Bluetooth™ technology (col. 6 lines 49-61). Motorola 1 and Motorola 2 also disclose Bluetooth™ technology upgrades for

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wireless MRI machine communications (see entire documents). It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the wireless remote control device of Kormos et al. to operate with current wireless technologies as taught by Frelburger et al. or Motorola 1 or Motorola 2 to enable faster transmission of data and provide additional capabilities such as connectivity to other users. In addition, although specific protocols of RF communication are not addressed, lacking any criticality, techniques such as handshaking would have been an obvious matter of design choice to a person of ordinary skill in the art depending upon the particular application.

Allowable Subject Matter

4. Claims 2-6 and 8 are allowed.
5. The previously indicated allowability of claims 11 and 21 is withdrawn in view of the newly discovered reference(s) to 'Motorola 1' and 'Motorola 2.'

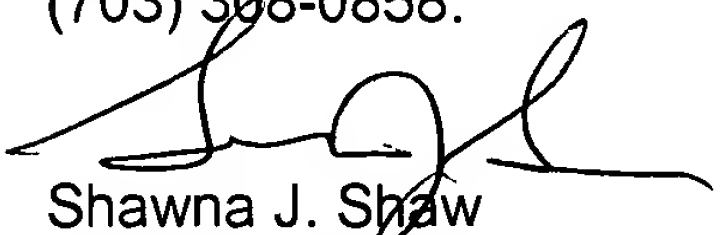
Conclusion

6. The finality of the last Office action has been withdrawn in view of newly discovered articles to 'Motorola 1' and 'Motorola 2.'
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawna J. Shaw whose telephone number is (703) 308-2985. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Ruhl can be reached on (703) 308-2262. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Shawna J. Shaw
Primary Examiner
2/26/04